

Amendments to the claims

Please amend the claims as follows:

1. (Currently Amended) A wheel suspension system for a vehicle having a body supported on a set of wheels each provided with a rim and an axle, comprising:

a lower control arm pivotally connectable to a first portion of said body;

an upper control arm pivotally connectable to a second portion of said body;

a bracket connected to said upper control arm;

an air spring disposed between said bracket and said body;

a shock absorber having an end connected to said upper control arm and an opposite end connected to an upper movable plate portion of said air spring;

a roller bearing having inner and outer races, disposed within said rim, coaxially relative to the rotational axis of said rim;

a steering knuckle mounted on the outer race of said bearing, having a first portion pivotally connected to said lower control arm and a second portion pivotally connected to said upper control arm, defining a steering axis intersecting said rotational axis; and

a hub member mounted on said inner race and connectable to an axle receivable through an opening provided in said steering knuckle,

wherein said bearing is provided with a set of cylindrical rollers, the axis of each of which is inclined at an angle of 45° relative to the axis of said bearing and is inclined at an angle of 90° relative to the axis of a successive roller.

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4. (Previously Presented) A system according to claim 1 wherein said steering knuckle is provided with an arm operatively connected to a steering system provided on said body.

5. (Previously Presented) A system according to claim 1 wherein at least a portion of said steering axis is disposed within said rim.

6. (Previously Presented) A system according to claim 5 wherein a lower portion of said steering axis is disposed within said rim.

7. (Previously Presented) A system according to claim 1 wherein said steering axis is inclined at an angle in the range of 7° to 9° relative to the vertical.

8. (Previously Presented) A system according to claim 1 wherein the connections of said steering knuckle to said upper and lower control arms comprise ball joint connections and wherein said steering axis intersects the centers of the ball portions thereof.

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11. (Previously Presented) A system according to claim 1 wherein said lower control arm comprises a panel.

12. (Previously Presented) A system according to claim 11 wherein said panel has a triangular configuration.

13. (Previously Presented) A system according to claim 11 wherein said panel has a curved bottom surface.

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19. (Currently Amended) A system according to claim 1 wherein said bracket includes a portion providing a platform disposed between said rim and a surface of a wheel well of said vehicle, and said air spring is disposed between said platform and said wheel well surface.

20. (Previously Presented) An assembly for a vehicle having a body supported on a set of wheels each having an upper control arm, comprising:

a bracket pivotally connectable at a lower end thereof to said upper control arm, having a portion at an upper end thereof providing a platform;

an air spring mounted on said platform and connectable to a surface of a wheel well of said vehicle;

a shock absorber having a lower end connected to said upper control arm and an upper end connectable to an upper movable plate portion of said spring; and

at least one guide means interconnecting said bracket and a movable member of said shock absorber.

21. (Previously Presented) An assembly according to claim 20 wherein said guide means comprises a least one rod extendable through a guide opening in a portion of an extendable portion of said shock absorber.

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54. (Previously Presented) A wheel unit mountable on a body to form a vehicle comprising:

a housing connectable to components of said body;

a gearbox mounted on said housing and having an input shaft and a pair of transversely extending output shafts and each side of said housing having upper and lower control arms pivotally connected to said housing;

a first support member pivotally connected to each of said upper and lower control arms, defining a steering axis;

a roller bearing having an outer race mounted on said first support member, and an inner race;

a second support member mounted on said inner race of said bearing and connectable to the hub portion of a wheel whereby said bearing will be disposed coaxially with the rotational axis of said wheel; and

an axle having an inner end operatively connected to an output shaft of said gearbox, and

an outer end extending through said bearing and connected to said second support member,

wherein each of said upper control arms, a first support member connected thereto and an adjacent second support member includes a passageway communicable with a source of air under pressure with a wheel mounted on said adjacent second support member.

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